Linear-Circular Switchable Polarizers

FEATURES:
- VSWR < 1.2
- Extremely Compact
- Manual Switch for Polarization Selection
- Higher Frequency Units will be Quoted on Request
- Axial Ratio < 1.0 dB Over the indicated Bandwidth
- Converts Linear Input Signals to Selectable Output Signals
- Available from 18.0 to 110 GHz with 3% or Greater Bandwidth
- Output Signal Options: Right-Hand Circular/Left-Hand Circular/Linear

APPLICATIONS:
- Radio Astronomy
- Communication Links
- Communication Systems

DESCRIPTION:
Cernex's CLP series polarizer, similar to Cernex's CCP series circular polarizers, will convert linear input signals to circular output signals with selectable output features. A manual switch on the unit allows for selection of the output signal's polarization sense or conversion back to a linear polarization. Therefore, for any linearly polarized input signal, the output may be selected to be right circular, left circular, or linear polarization. The characteristics of the circularly polarized signal are similar to Cernex's CCP model.

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Waveguide Band</th>
<th>K</th>
<th>Ka</th>
<th>Q</th>
<th>U</th>
<th>V</th>
<th>E</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waveguide Size</td>
<td>WR-42</td>
<td>WR-28</td>
<td>WR-22</td>
<td>WR-19</td>
<td>WR-15</td>
<td>WR-12</td>
<td>WR-10</td>
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<tr>
<td>Frequency Range (GHz)</td>
<td>18 to 26.5</td>
<td>26.5 to 40</td>
<td>33 to 50</td>
<td>40 to 60</td>
<td>50 to 75</td>
<td>60 to 90</td>
<td>75 to 110</td>
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<tr>
<td>in</td>
<td>2.3</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
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<td>mm</td>
<td>58.4</td>
<td>38.1</td>
<td>38.1</td>
<td>38.1</td>
<td>27.9</td>
<td>27.9</td>
<td>25.4</td>
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</tbody>
</table>

HOW TO ORDER:
Specify Model Number
the factory

CLP – WG LF HF -- XX
To be specified by
Waveguide Size
High End Frequency
Low End Frequency

Example: To order a circular polarizer with flange size of WR-15, specify CLP-155075-XX

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